California GARDEN

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Fifty Cents

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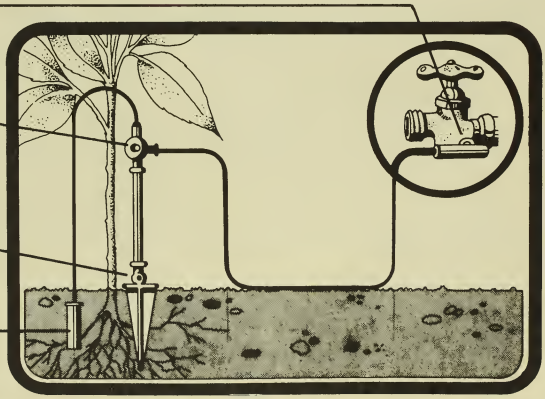
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EVENTS PAGE

SHOWS

January 18 & 19: San Diego Camellia Society "Mini" Camellia Show, Majorca Room (101) Casa del Prado, Balboa Park; 11:00 a.m. to 5:00 p.m. both days; FREE.

January 22: The San Diego Chapter of Ikebana International and the Asian Arts Committee of the Fine Arts Gallery will co-sponor a lecture-demonstration by Miss Kasumi Teshigahara, the Vice-President and Master of the Sogetsu School of Japanese Flower Arranging, 1:00 p.m. at Copley Auditorium of the Fine Arts Gallery, Balboa Park; $4.00 for members of Ikebana or the Fine Arts Society, $5.00 for non-members; tickets are available at the art museum of through Ikebana members.

According to Mrs. B. Donald Gaw, President of San Diego Ikebana International, and Mrs. David Miller, Chairman of the Asian Arts Committee of the Fine Arts Gallery, Miss Teshigahara will do approximately fifteen arrangements. The lecture-demonstration will be followed by a tea in the Sculpture Court. Mrs. Gaw and Mrs. Miller stated that Ikebana (endowing flowers with life) is not a new event to art museums. The Louvre presented a one-man show of Miss Teshigahara's famous father, Sofu, some years ago. Miss Teshigahara, by special invitation, created a very large arrangement in the United Nations Building in New York City in October of 1974. Miss Teshigahara was born in 1932, the first daughter of Sofu, and has been studying Ikebana since childhood. At age eighteen she began teaching. At age twenty she had her first one-woman show in Tokyo. Since then, she has toured many countries by invitation of foreign governments and various cultural organizations.

Commentary by MRS. JAMES J. BROPHY

January 25 & 26: "Preview of Spring" flower show presented by the Flower Arrangers' Guild of San Diego, Casa del Prado, Room 101, Balboa Park; 12:00 noon to 4:00 p.m. on January 25th and 10:00 a.m. to 4:00 p.m. on January 26th; FREE.

February 8 & 9: San Diego Camellia Society's 28th Annual Spring Show, Conference Building in Balboa Park, 1:00 p.m. to 5:00 p.m. on February 8th and 10:00 a.m. to 5:00 p.m. on February 9th; 50 cents entry fee.

February 15 & 16: The 26th Annual Meeting of the Pacific Southwest Dahlia Conference being hosted by the San Diego County Dahlia Society, Shelter Island Inn 1:00 p.m. February 15th and 8:30 a.m. February 16th, followed by a banquet at 7:00 p.m. on Saturday the 15th.

On February 15th, California's most expert dahlia growers will convene in San Diego for their annual two-day conference. Nine dahlia societies will be represented. The breakfast meeting on Sunday the 16th will be devoted to reports and discussions of affairs of the various societies and a formal presentation of awards earned at last year's dahlia shows throughout the state.

Abe Janzen, President of the San Diego Dahlia Society also is President of the Conference this year and with the assistance of a committee, will preside over the conference. An attendance of more than 100 is expected, with many of those from outside the San Diego area. Visitors will be welcome at all the sessions. Interest at the conference will probably center on announcement of the new top dahlia seedlings shown and introduced for the first time at last year's shows and grown in trial gardens of the American Dahlia Society. One of these trial gardens is located in Oakland and is supervised by the East Bay Society, which each year tests new varieties submitted by growers in all parts of the world.

Commentary by ABE JANZEN

February 22 & 23: San Diego Orchid Society "Mini" Show, Majorca Room, Casa del Prado, 11:00 a.m. to 5:00 p.m. both days.

March 22 & 23: Seventh Annual "Festival of Ikebana and Japanese Art" presented by the San Diego Chapter of Ikebana International, Casa del Prado, Room 101, Balboa Park, 11:00 a.m. to 4:30 p.m. both days; FREE.

April 23 through 26: San Diego hosts the National Convention of the American Iris Society, headquarters at the Royal Inn at the Wharf, on San Diego Bay.

Present indications are that well over 500 irisarians will be in attendance from all parts of the United States, and with additional representatives from England, Canada, Australia, New Zealand, Germany, Switzerland, Italy and South Africa. On schedule are a whole series of meetings, lectures and banquets in the convention facility of the hotel. Also on schedule are tours of ten of the most outstanding private iris gardens of San Diego and Riverside Counties. These are the Cosgrove-Conrad garden in Escondido, the Cordon Bleu Farms of San Marcos, the Gunther garden of Del Mar, the Hamner garden of Perris, the Hooker garden of Spring Valley, the Oak Trail Ranch of Valley Center, the Owen garden of Encinitas, the Pilley garden of San Marcos, the Roberts garden of El Cajon, and the Vogel garden of Riverside. The leading hybridizers of the nation have sent to each of these gardens many new hybrid iris varieties which have not yet been released for commercial distribution. These varieties will be evaluated and judged by all the convention visitors, and one of the highlights of the final day will be the tallying to determine which of these "guest" irises have been voted as most outstanding. Results of the balloting, and various other reports about the San Diego Convention, will be featured subsequently in more than a dozen of the world's horticultural publications.

Commentary by BILL GUNTHER

April 24 & 25: San Diego hosts the 85th National Rose Convention, the Town and Country Hotel/Convention Center, Hotel Circle, Mission Valley, 1:30 p.m. to 9:00 p.m. on April 24th and from 9:00 a.m. to 2:00 p.m. on April 25th and entries for the Rose Show will be accepted on Thursday April 25th from 7:00 a.m. to 11:00 a.m. at the Town and Country Hotel/Convention Center.

For the first time in the history of the San Diego Rose Society, Southern Californians can attend a National Rose Show. Roses may also be entered in the competition in this show and all amateurs are invited to exhibit. There will be members of the San Diego Rose Society available to assist exhibitors in entering roses in competition. Containers will be furnished for cut blooms, and a classification committee will aid exhibitors in making proper classification of roses.

There are other benefits besides the opportunity of competition in a National Rose Show. The local rose society offers first, second, and third place ribbons in all classes. Trophies are given to Blue (first place) Ribbon Winners only. Membership in the San Diego Rose Society is awarded to all Blue Ribbon Winners who have never been members of the society. Between fifty and sixty trophies will be awarded. Arrangements are being made for roses sent air freight by special chairman Richard Bechtel. A refrigerated truck will house the roses at the Convention Center.

Convention Chairman and Co-Chairman, Mr. & Mrs. Harry Cutler, and the convention staff have prepared a welcome and convention program. Come join us! John Farleigh, President of the San Diego Rose Society and its members extend to you an invitation to learn that a rose is a rose is a rose in ole' San Diego town.

Commentary by MARY JANE HERSHEY

MEETINGS

January 21: San Diego Floral Association Meeting will feature Helen Herney speaking on San Diego's Legacy of Trees—An Appreciation of Use and Beauty; 7:30 p.m. Room 101, Casa del Prado, Balboa Park.

TOURS

February 1: Huntington Botanic Gardens in San Marino, departs from Balboa Park 8:00 a.m. and from the La Jolla Library at 8:30 a.m.; $8.50.

March 13: Getty Museum Tour, departs from Balboa Park at 8:00 a.m. and from the La Jolla Library at 8:30 a.m.; $8.50.

Basic Hints on Roses

by Mr. & Mrs. OTTO BARKSDALE

WITH SPRING hopefully around the corner, rose growers have had and will continue to realize a busy and rigorous schedule in order to produce lovely blooms for their home and possible entry in shows. We would like to share with you some basic hints that should be helpful.

Depending on your location and the rose variety, roses should be pruned in San Diego County between mid-December and mid-February. The purpose in pruning is to renew our rose bushes, thereby producing the most vigorous plant we can grow. If that is done, the flowers will take care of themselves and a generous crop of quality blooms will follow as the night follows day. As in all operations, basic tools are required, namely—loppers, saw and hand pruners. Make sure they are sharp and in good repair. The first step will then be removal of old wood including not only the dead and diseased, but old canes or branches that do not give rise to new lateral growths or branches that will bear flowers. Their removal will help in two ways: first, it prevents the waste of such nourishment that would go to these parts if they were left on and conserves this for new growth; secondly, it increases the amount of sunshine, air and light which can reach the remaining parts of the plant. The latter is helpful in reducing the chance of the introduction of disease or plant pests from the old wood to the new growth. Removing surplus wood differs from removing old wood in that the surplus wood may be healthy, but many times too vigorous. Dense crisscross growth also keeps out sun and air and again provides ideal conditions for the development of disease and pests. Leave three to five of the newest canes symmetrically located so you will have a nice looking bush, rather open in the center and cut to an outside eye. The lower growing floribundas should be cut to about twelve inches in height, taller grandifloras about 28 inches and hybrid teas around 18 inches.

Upon completion of your pruning, be sure to clean house in your rose beds as removal of leaves and cuttings will help eliminate wintering insects and fungus. Give your bushes and the ground around them a good dormant spraying. It is advisable that this be done promptly after pruning to insure new growth isn't injured by an extra-strength spray material. Since most soils in San Diego County have an alkaline content, an early application of about a cup of sulphur around the base of each plant is helpful. Mid-February is about the correct time to apply fertilizer to your established plants and a cup of balanced fertilizer is a starter for each plant.

Having used a standard dormant spray at time of pruning, it is generally not necessary to use an insecticide until mid-spring. However, when early arriving pests such as aphids appear, don't panic and grab for the spray gun as the best approach to this problem is spraying with water. Adjust your hose to its finest, open the faucet to a pressure high enough to force a strong jet of water directed to the parts you want sprayed. Do this as often as they reappear as this will knock off the aphids.

Since January and February is bare-root season in our local area, information in this regard might be helpful to our new rose growers. All important is the buying of healthy grade number one roses in varieties suited to your location. Nurserymen that specialize in roses (so plentiful in California) are glad to advise the new grower all they can. Keep in mind that roses do best in a well-drained site which gets full sun all or most of the day. Make sure that they are not planted too close to lawn areas or tree or shrubs that may cause root competition. Roses do well in any reasonably good soil. In very heavy clay or adobe

soil, take care to provide adequate drainage by ditching or building up the bed.

Suggested planting methods for bare-root roses are as follows:

1. Dig a hole for your plant, wide and deep enough to accommodate the roots when spread out naturally. Add a few shovels of plant mix or mulch to your soil plus a handful of bone meal.

2. Form a c one in your planting hole, firming the soil well enough to prevent air pockets and settling.

3. Place bare-root roses over the cone so that bud union is about one inch above the level of adjacent soil. Remember, it is better to be a little too high than too low. Now, fill in with soil over the roots.

4. Keep watered well and check for settling.

5. Keep moist until well established.

6. It is extremely important to protect the canes of newly planted roses from dry air, drying winds and extremes of heat or cold. To prevent moisture loss, mound loose damp soil, damp peat moss or damp shavings around your plants.

7. Newly planted roses should not be fertilized until they are well leafed out and growing vigorously.

In closing, we feel this paragraph quoted from "The Rockwells Complete Book of Roses" is most appropriate: "The Rose Grower must have not only the glowing admiration, the enthusiasm and the passion, but the tenderness, the thoughtfulness, the reverance and the watchfulness of love." □

Native Plant

by LOUISE De GROOT

Datura tolguacha——Jimson Weed

ALMOST EVERY country road shows, somewhere along its length, a mound about two feet high of grayish green leaves scattered with large, white wraith-like flowers. Highly valued by the Indians for its narcotic properties, to us it is a weed, worthy only of the road edges. But these it adorns with unsuspected beauty which will amply repay a closer inspection.

Enclosed at the base within a long loose, faintly ridges calyx, the white funnel of the flowers opens. Its ruffled, widely flared mouth is decorated with five thread-like hooks and trimmed with faint purple which enhances the papery thin delicate look of the flowers.

Usually there are not many at one time on the mound, which is made up of strong, shiny stems and triangular shaped leaves, about two to four inches long. There might be, also, the interesting fruit, a round green ball entirely covered with green prickles.

The flowers actually are as impermanent as they look for, in late afternoon, they furl by folding along the five divisions marked on the funnel mouth. The soft ruffles are tucked neatly into the center. Then looking like a child's windmill toy, it is as beautiful in the neatness of its fading as it was in the delicateness of its blooming. □

The Life and Times of Herbert C. Swim

Rose Breeder

NOTE: The following is the result of an interview written up by Monsieur A. Souzy, Chairman, Le Societe Francaise des Roses, in the French language and roughly translated for publication in various journals of The American Rose Society. A certain amount of literary license is self evident but has been retained at our discretion in the belief that no essential facts are distorted and that a degree of charm is thereby added.

ABOUT SIXTY YEARS of age, not very tall, rather frail looking, with receding hair, quiet, reserved and a good confident smile enlightening his face; this is how I saw Herbert C. Swim when I met him in Strasbourg in July 1968, at his French agent's Paul Pekmez (the owner of the firm NIRP–ROSEUROP). I was on my way back from Baden–Baden where Mrs. Suzanne Massu had been given the rose that is now named after her, by the great hybridizer, Kordes. This is a rare privilege that can lead you to immortality. Who would now remember Caroline Testout, Zephirine Drouhin, General Jacqueminot or Marechal Niel without the roses that were named after them?

I don't know why Herbert C. Swim came to France, but while he was there I had the pleasure of having lunch with him. We mainly talked about roses.

He was born in Stillwater, Oklahoma; his parents were farmers and he was third in a family of four children. His marriage with Helen Lois Smith in 1935 gave him two daughters and he now has three grandsons and one granddaughter.

His origin predisposed him to an agricultural profession, but having a sensible and curious mind he first had a scientific instruction learning genetics, plant physiology, chemistry, and other related fields. Then he studied landscape materials and design, architectural design and as his thirst for knowledge still wasn't quenched he carried on with language, literature and history. As you can see or rather as you can feel when you meet him, he knows a great many things, and this knowledge has been enriched by a long experience. He could have been a teacher, or director of a modern farming concern, or worked in a laboratory; he could have done a thousand interesting things. . . . but his mother, whom he worshipped, loved roses and she encouraged him to produce them. That wasn't difficult for him as he loved them too. He was interested in working with the soil, and as he says, being in the right place at the right moment he became a rose breeder.

Yet it was not until his 41st year that he obtained his first great success with "Applause", Gold Medal at Bagatelle in 1947. It is a pale red rose shaded orange, quite full, large and fragrant. But other successes were awaiting him, and, varieties such as "La Jolla", "Sutter's Gold", "Buccaneer", "Mojave", "Helen Traubel", to quote only a few out of nearly 200 roses to be introduced from his work and that were to be seen in gardens all over the world.

Swim has a scientific mind, but he has managed to free himself from figures and formulas. He thinks of himself as more involved with art forms than with science.

"Empiricism", he says, "is nothing but experience, and who would dare to contest its value when speaking of research? Genetic studies are nothing else really."

The law of great numbers? "Since the distribution of hereditary characteristics in any population of seedlings from given parents is on a random basis, then it naturally follows that the

greater the number of seedlings produced the better the chances of obtaining the combination of characters one desires. But don't get too many illusions. Since the genetics of roses is very complex, it takes many more seedlings than one could possibly produce, even in a lifetime, to pinpoint an objective containing a precise group of characteristics in one individual new cultivar. If this special character is obtained quickly, it just means that it was a primary one, not very well defined or that luck has played its part in getting it."

Intuition? "It is only a deduction based on disordered facts, much like the action of a computer where facts are stored in "memory" and presented on demand in what may seem to be an unreasoned conclusion but which is in reality the result of a logical combination. As a matter of fact, the human memory works exactly on this pattern, and intuition is only a deduction from phenomena it has stored without noticing it. On the other hand, observation is a very, very important thing in research. If you haven't got this gift to start with, you would do better to do something else than rose breeding. Nothing should escape a hybridizer's attention. A rose is made of thousands of little details and each detail has its importance. A rose is alive. It changes, and all its different states must be carefully observed and analyzed. The hybridizer must know the lasting elements of a lineage, he must try to understand why they exist, he must try to imagine what he can obtain with them. The most important discoveries in any subject are generally due to a consideration of phenomena that might have seemed to be of no importance at the beginning and sometimes even troublesome. Let's take an example: One single petal of a young seedling might bear a white line, or may be spotted or be of a different color, or even a different shape. This can be considered as a defect that has to be suppressed or as a unique character that needs to be emphasized. You have to make a choice, but you must not be dazzled by this choice because life is short and a rose breeder must be wise enough to limit his ambitions. Take the blue rose for instance—it is possible that we will know it one day. I hope so for I am extremely fond of the color blue, dark or light, but I don't like blue muddied with other colors. The hybridizer who might spend his lifetime looking for the blue rose would be making a mistake, in my judgment. It should constitute a marginal program of hybridization, only, for if it comes it will come in due course, and probably as a surprise. In five years time or in 100 years time—nobody knows. You can work with much more assurance of making your life's work worthwhile if you spend your principal effort with experimentation with combining the colors we already have. Who knows? Even blue may arise from such a quarter."

How many pollinations do you make each year?

"From 6,000 to 8,000 which represent 150 to 300 different parent combinations."

Do you think that all breeders work on the same pattern?

"By no means—no. Each breeder is an individual and must be creative and original. I speak of course of those who can be called breeders in a true sense."

What is your opinion on Rose Trials ?

"Some are good and some are not very significant. I am most familiar with the All-American Rose Selections Trials (AARS) which I regard as excellent in concept. The roses presented there are tested throughout the United States in approximately 24 gardens. They are submitted to a wide variety of weather. They are watched over and scored for two years by highly skilled rose judges in each different region and it is the sum of all these different scores that determine the order of voting by the trustees to determine those varieties worthy of recognition by the organization. Such are designated AARS Award Winners. In my opinion, these trials are the most important ones in the world."

"You know a rose is always a rose whether it gets an award or not! When as a child, my mother used to lift me up in her arms to enable me to smell a rose or just to look at it, I didn't care if it had been granted any awards. All roses seemed equally beautiful to me. . . .provided they were very dark red ones or yellow ones. Later, at about eight or ten years of age I started collecting catalogues and got interested in fruit trees. We already had a lot, but I was always wheedling my parents to buy new varieties, mainly apple and peach trees. I read again and again about the life of Luther Burbank, which made me dream about following

in his footsteps, although I never really expected to have the opportunity to do so."

"At this period of my life all plants and even vegetables interested me. I wanted to know everything about their secrets, and that's what made me prepare for college enrollment and for training in horticulture."

"My first nursery experience began as soon as I left the university when I went to work for the Coolidge Rare Plant Gardens. Over 4,000 varieties were growing there, or so they advertised. These plants came from every continent. From the tiniest ones to the biggest ones, most of them with different needs as to culture. It was an exceptional place. You do not develop such a place, or work there for that matter, to get rich, but because you have a passion for it. The name of Mr. D. W. Coolidge was known all over the world, and his fame was justified for I believe he was the greatest collector of plants that our time has known. He grew some rose nursery stock too, specializing in standard roses for which he had developed a new understock about the time I came to work for him. He named it IXL, a play on words. It was very superior for the climate and soil of many places in southern California so that the size and color of the rose flowers produced were remarkable. I saw on this type of standard rose, roses like "Golden Emblem", "Talisman", "Souvenir de Claudius Pernet", "Souvenir de Georges Pernet", "Julien Potin", and many others that were relatively new at the time, and I have never seen such roses anywhere since. I was full of enthusiasm. I read all the books about roses I could find, and to persuade other people to share this passion I had, I remember giving beautiful cut blooms to everybody I knew, expecially women either young or old."

"In the course of time I was placed in charge of the rose growing operation at Coolidge Rare Plant Gardens. I stayed with this company for about two more years, but at that time I began to feel the need of wider horizons, especially in roses. So I came to work for Armstrong Nurseries where I was hired to take charge of rose production as well as participate in sales in various capacities. There I found lots more roses, the yearly production of rose nursery stock being about 300,000 at that time."

"One year after I came to Armstrong Nurseries, Dr. Walter E. Lammerts was hired to take charge of the hybridizing program where he remained for five years. In 1940 when Dr. Lammerts chose to go back to the University of California, he recommended me as his successor and I in that way became the Director of Research just before my 34th birthday. This involved among other things the breeding, not only of roses, but of fruit varieties for which I had retained an affinity since farm days, and camellias. I owe much to Dr. Lammerts, not only for this help to a glorious opportunity, but for his friendship which I value to this day. I remember that several of us persuaded him to conduct a seminar in plant genetics, plant physiology, and systematic botany. It was great fun and soon became a social activity and involved our wives in that way."

"I was very lucky to obtain awards with my first entries in competition both in AARS and abroad. More were to follow but nothing can compare to the thrill that came with those first ones. It is one thing to believe that you can succeed but something quite apart to know that you will have the opportunity to continue to do successfully what you most like to do. Now I am often asked what are my favorites among my own varieties. My evaluation of such has changed a little from time to time but I now see these as "First Love", "Montezuma", "Royal Highness", "Oklahoma", and "Mister Lincoln". Since all are still widely grown in many parts of the world, perhaps I'm justified."

"This profession gave me the opportunity of making a great number of friends amongst other rose lovers. We often meet and spend our time speaking about roses. Such as these never tire of talking about the subject."

Herbert C. Swim is very fond of reading. Naturally all that concerns roses and rose breeders interests him more than anything else, but he also likes reading about history, philosophy, science and economics. Oh yes, and sports!

He relaxes listening to all kinds of music, except "rock", which as he says, is only a monotonous noise for him. He particularly likes men's choral groups and Negro spirituals.

I don't know what led us into talking about sports, but it was then I learned that he participated in football (American), basketball, and track, and

that he is still interested as a spectator in all kinds of sports. He told me that he still participates in golf, which combines a beautiful surrounding with a healthy sport.

Then we dropped back to roses, of course, and I told him I was rather surprised to see that amongst the large rose nurseries only a very few have attempted breeding research.

"These are two very different things," he said. "A rose nursery only considers the short term, and a researcher the long term, and besides I think that everybody doesn't like adventure. The nursery is just interested in rose plants as a subject for marketing. That may be the wiser course. But it is good sometimes to forget about wisdom. It's then you dream of impossible things and that you become a rose breeder."

Do you believe we might one day choose cross combinations with the help of a computer?

"Why not? The success of such a program would depend entirely on the honesty and the knowledge of the programmer himself. We have a saying in the United States with regards to the programming of a computer: GIGO or garbage in, garbage out!"

For thirteen years Swim left to do nothing but breed roses with a partner. It was a successful venture but was terminated for health reasons. After a short retirement he came back to Armstrong Nurseries on a much reduced schedule. Here he worked until final retirement at the foot of the San Bernardino Mountains. He still lives there for as he says with his confident smile, "Here I can lift up mine eyes unto the hills." □

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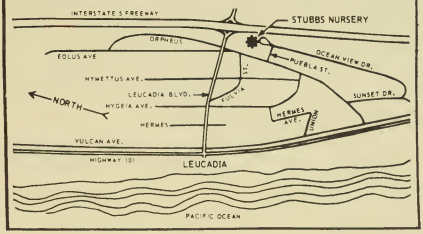

Charlotte Armstrong

Garden Party

Dwarfed Fruit Trees

by ROSALIE GARCIA

AS LIFE becomes more urban, our craving for an orchard of our own is forcing us to seek smaller trees for our city lots. Dwarfing trees, practiced as far back as hundreds of years B.C., is now being revived to fit our needs. Agricultural experiment stations and long established nurseries are experimenting with root stocks and grafts to dwarf our popular fruits. At present their successes are greater with citrus, apples and pears, and to a lesser degree with the stone fruits such as peaches, plums, apricots and cherries.

Few of our cultivated fruits are dwarf by nature. The small trees grown in pots, espaliered on walls and trellises, and planted in hedges are not natural species. They are dwarfed by grafting or budding cuttings from regular sized trees to root stocks of smaller varieties of wild trees that are hardy and produce inferior fruits similar in their gene structure to the regular trees. Like all living things there is a tendency to reject a foreign body. The problem of our plant scientists has been to find the proper root stocks. Continuing experimentation is in progress.

Our local nurseries and nursery catalogs offer a selection of dwarfed trees. Burpee lists apples, pears, nectarines, cherries, peaches and apricots. Now is the time to buy and plant these trees. It is recommended that one know what the root stocks are, but generally the nurserymen do not know, and the wholesalers do not include such information with their brochures. They do include some instructions on planting which should be followed.

Most apple trees, for example, have at least a strain of the Malling in their root stocks. This strain was produced by long experimentation in England early in the 19th Century. The Bonanza peach has been much advertised and has been grown in our area. It does produce abundant crops of beautiful, deeply roseated fruits on three to four foot trees with glossy foliage. The fruit has no more flavor than a drink of water. It may do better in a chilling climate, but for us it is useful only as an ornamental. Mr. C. I. Jerabek, our "tree man", planted a half dozen of these Bonanza peach trees. They were quite beautiful and he ate the fruit with lots of sugar. The Stanley Millers in El Cajon tried them also and found a few had a slightly peachy flavor, but most were too bland to be exciting to eat.

I am sure that many have tried other stone fruits in this area, but I have not personally seen any dwarf cherries, apricots or plums. Pears do well in chilling climates grafted on to quince roots to make semi-dwarfed trees. The long established Stark Brothers in Louisiana, Missouri, advertise that they have spent $76,000 to create two semi-dwarfed apple trees, and that area they are located in is apple country. They specialize in the semi-dwarfed trees. These usually reach about fifteen feet and lend themselves to commercial acreages for easy care and harvesting. They do not offer apricots and plums, and only one cherry tree.

Mr. George James, a former nurseryman and a California Garden staff writer, has a semi-dwarfed banana-apple which produces amply for him. He says the fruit is bland in flavor, but cooks well. Burpee lists five dwarfed apple varieties, even one tree on which five different varieties have been grafted. One advantage in these dwarfed trees is that they bear in two or three years. Burpee advises planting more than one variety for cross pollination.

In our subtropical area we have had better success with the dwarfed citrus. Redwood tubs with small orange, lemon, kumquat, lime and even grapefruit are common in our patios. They

are both decorative and fruitful. Seldom do we see the oldest known citrus and one of the few dwarfs—the citron. Many have never seen it, or if they have, thought it to be the fairly common Ponderosa lemon. It is big and long with rough skin, and a rind about an inch thick, with sour, bitter and pungent flesh. The rind is used for candying, the juice in liqeur, and the inside pith of the rind for treating diarrhea. The University of California in Riverside has been experimenting with it and hopes to find a modern adaptation for our oldest citrus. (The candied citron we buy for fruit cakes comes from a melon.)

The dwarfed Meyer lemon is probably the most widely grown of all the dwarfed citrus. One seldom sees the regular sized Meyer. It is hardy, bears abundantly, seldom gets more than three feet high, and like a true tropical, blooms and bears fruit throughout the entire year. It is deep yellow, round and looks like a small orange, but it is very tart with a distinctive flavor unlike our other lemons. A thin rind keeps it from being in the commercial trade. I have a tree that has borne faithfully for over twenty-five years, except one year when we had an unusual freeze. It turned yellow, lost all of its leaves, and I thought it was finished. I fertilized it heavily, mulched it well so that in one year it was blooming and has had fruit ever since. The Meyer lemon is banned in Arizona and the San Joaquin Valley here in California because it carries a disease known as "quick-decline."

Planting and caring for the dwarfed citrus, as well as the other dwarfed trees, requires special care. Since these trees must be grown on root stocks that restrict vegetative growth, one must be careful to keep the graft union above ground, and this means about four or five inches. If this is not done, the graft will soon be putting out roots and will free itself from the root stock. Since the graft stem is likely to be frail, the tree needs a stake to keep it upright until it is several years old. For this reason espaliers have been a favorite support, both ornamental and secure. A hedge of Meyer lemons, kumquats or mandarins is both decorative and fruitful, and seldom would be more than four feet high. The kumquat with its small leaves and compact growth form lends itself to pots and tubs. Most all dwarfed trees have a tendency to be sprawly and even scraggly and need careful supports and pruning. Decide the form most suitable for the location and the structure of the tree before starting to snip.

In planning for dwarfed trees in southern California gardens, don't expect much from the stone fruits. The apples and pears will be bland, but with the citrus, there are varieties to be both decorative and fruitful. Look in the nurseries now.

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Born In California

by JACK E. CHRISTENSEN

SOME OTHER ROSARION may have noted this before, but I rather doubt it—it's one of those things you just don't think about, and yet it implies a significant consideration to rose lovers everywhere. . . .

I was studying a list of the All-America Rose Selections granted over the years—since they began in 1940—envisioning some of the all-time favorites such as Charlotte Armstrong, Chrysler Imperial, Garden Party, Angel Face and others. As I pondered on the varieties, it seemed to me that most of them were California natives. This thought intrigued me, because I am a Californian of three generations. So, I set about to find out.

It seems a strange thought, since the A.A.R.S. is known throughout the world and is a testing ground for the most promising roses developed everywhere. Entries are submitted from Germany, France, Belgium, Northern Ireland, even Luxembourg and others as well as the United States, and are thoroughly tested in 23 different locations in this country to determine which are best suited for the American gardener. What about California?

Well—I began counting. Germany has four All-America Winners: World's Fair in 1940, Floradora in 1945, Tropicana in 1963 and Oregold in 1975. France received eleven: among them Peace, Sarabande, Christian Dior and Miss All-American Beauty. Northern Ireland contributed three to the list, Electron being the most recent. England, Belgium, Luxembourg and Holland are each responsible for one award winner: Redgold, Pascali, Grand Duchesse Charlotte, and Europeana respectively.

Out of a total of 94 All-America awards granted, 22 went to roses originated outside the United States. That leaves 72 which were "made in the U.S.A.": Rose Parade came from Maryland, Portrait first appeared in Ohio, Pennsylvania was the birthplace of one 1940 winner, and New York gave Fashion, King's Ransom, Saratoga, Apricot Nectar, Gene Boerner, First Prize and others to a total of 17 varieties. That's quite a few from New York.

BUT ALL THE REST—that is, 52 of the 94 All-America Rose Selections—had their beginnings in California! That's over half of all the roses acclaimed to be the best varieties for Americans to grow!

Well, I wasn't expecting this. I wonder what the reasons are? Why has California made such a big contribution to rosedom? Who in California has contributed so much to the rose world? What are some of these California beauties?

I went a little deeper in my search and found some more very interesting facts. Carl G. Duehrsen of Montebello, California, developed Mme. Chaing Kai-shek, a 1944 award winner. Fred Howard, also of Montebello, originated four winners, one named for himself, one called Heart's Desire, and two others. Theodore Morris of Van Nuys, contributed three roses to the winners' list: San Fernando, Mission Bells and Capistrano. Golden Slippers resulted from the handywork of Gordon J. Von Abrams in Davis, California; Robert V. Lindquist, working out of Hemet, produced five All-America winners—Lilibet in 1954, Tiffany in 1955, Granada in 1964, Roman Holiday in 1967 and Command Performance in 1971.

The recent winners Medallion and Bon-Bon, came out of Tustin under the direction of William A. Warriner. O. L. Weeks of Ontario, California claims the three winners Gypsy, Perfume Delight and Arizona, while Dr. David L. Armstrong, also of Ontario, takes full credit for Apollo and Aquarius.

Dr. Walter E. Lammerts, while working in Ontario received recognition for the five winners including Charlotte Armstrong and Mirandy. After moving from Ontario, Dr. Lammerts developed seven others among them Chrysler Imperial, Queen Elizabeth, American Heritage, Bewitched and Bahia, making a total of twelve award winning varieties. Quite a remarkable contribution to the world!

The remaining 19 All-America Rose Selections are among the creations of Herbert C. Swim. An outstanding array of rose cultivars stands to his credit and applause as the one individual responsible for the greatest number of award-winning roses. Among these are Pinkie, Forty-Niner, Sutters Gold, Mojave and many more. All had their births in Ontario, California. That makes thirty A.A.R.S. winners—nearly a third of all that have ever been named—originating from one small town—Ontario, California.

Very interesting—some of these things you just don't think about, but are worth a second thought by rose lovers everywhere. □

The Camellia—Its Origin, Culture and Use

by BENJAMIN H. BERRY

THE INTRODUCTION OF THE camellia to the Western World came about through both accident and design. The accident being on the part of the sailing ship captains who thought they were getting tea plants and the design being on the part of the Chinese who gave them plants that looked like tea plants but weren't. At the end of the 17th Century European sailing vessels were trading in the Asian waters and tea was becoming a popular beverage, so popular that tea plants were sought for cultivation in Europe. Thus some of these early ship captains sought to buy the tea plant, *Camellia sinensis*, from the Chinese. Not wishing to lose this trade they sold the ship captains a plant of the same genus, the *Camellia japonica*. In outward appearance the plants seem to be the same. In time it became evident that these early plants were more to be admired for their flowers rather than their leaves. The flowers were so striking and the bloom came at a time when so little else furnished color that they were not long in finding homes on estates both large and small. Today on the English estates many of these older camellias may be found that are thirty or more feet in height and almost as broad. The beauty of the plant and of the flower soon made it a favorite in all of Europe. Shortly after the Revolutionary War camellias began to find their way to the United States and, in turn, across the country.

The camellia is native to Asia though closely related plants are found in other parts of the world including the United States. Various of the species have become popular and are to be found growing in all but the coldest areas of the United States . Even in these coldest areas a few hobbyists are growing them in hot houses. Some camellias have peculiar characteristics, like the *Camellia rusticana* or snow camellia. It is a willowy plant that bends to the ground under the weight of winter snows but with the spring thaws it rises again and very soon breaks forth in a lavish display of flowers. Then there is the *Camellia lutchuensis* with very small leaves and very small white or pinkish flowers that have a most delightful fragrance surrounding the plant like an aura.

Camellias are native to all of Asia. At the time the first plants found their way to the Western World, Japan was yet a closed country not welcoming foreigners. Thus, it was not until some years later that the camellias that had been cultivated by the Japanese for several hundred years found their way to the Western World.

The first of the species introduced to the Western World was the *Camellia japonica*. Subsequent species have been introduced from Asia though the *Camellia japonica* is yet the reigning favorite. However, in 1948, several of the *Camellia reticulata* plants were brought to California from the Orient. These are noted for their large blooms (six to eight inches across) and their wavy, crinkled petals. Much hybridizing has been done crossing the *reticulata* with the *japonica* and with other species. The results have been outstanding and the *reticulata* hybrids are rapidly increasing in popularity. One of the foremost hybridizers in this area is San Diego's own Howard Asper.

Another of the camellia species that finds much popularity is the *sasanqua*. Generally it is earlier blooming than the *japonica* or the *reticulata*. However, there are later blooming varieties of great beauty that are currently available in local nurseries. Both the leaves and the flowers of the *sasanqua* are smaller than most *japonicas*. The flowers of the *sasanqua* have had a tendency to hold on the plant for a far less time than those of the *reticulata* and the *japonica*. While this has not been a serious objection to the *sasanqua*, the newer varieties seem to have a tendency to hold the bloom

on the plant for a longer time.

Over the years much has been said about the beauty of the camellia flower. All of this is true. But the plant has other virtues that sometimes go unnoticed. Camellias are evergreens. Most of the *japonicas* have shiny deep green foliage, the same being true of the *sasanquas* though the *reticulatas* have a less shiny foliage with leaves usually longer than the other two. The camellia flowers during its dormant period, generally from November through March. Some *sasanquas* begin flowering in September. In southern California we usually have less garden bloom during the months of December, January and February unless, of course, we have sufficient plantings of camellias. This period is the height of camellia blooming and many gardens are a riot of color. During the summer months when flowers are abundant in southern California the camellias furnish a rich green background imparting a cooling and a tranquil effect to the garden.

The camellia is perhaps one of the easiest of all plants to grow. Those of us in southern California are fortunate in having a climate that is ideally suited to the growing of camellias. In fact, in southern California we may grow certain of the species as garden plants that require special culture in many other parts of the so-called "camellia belt". Camellias do not require constant care and attention to thrive. If given a suitable location they may thrive on seeming complete neglect. The needs of this plant are simple and its wants are few. All camellias need a well-drained soil—one that is not constantly wet but only slightly moist. It also needs a soil that is slightly acid having a pH factor of about 5.5. It will thrive on regular feedings and it will thrive on only occasional feedings. There are camellias that have not been fed since the Japanese bombed Pearl Harbor. But do not be fooled by this rarity. These plants are growing in an ideal situation and derive such food as needed from decaying vegetable matter. In its native habitat the camellia grows in the filtered shade covering of a not too dense forest. Decaying vegetable matter from the fallen leaves of the trees furnish the plant all of the food it requires. There it flourishes and grows into large shrubs or, if you wish, small trees. In man's constant attempt to improve on nature, we find ourselves feeding some plants more than would normally be required to maintain healthy growth. Some camellia hobbyists fertilize the year round with half strength feedings at six to eight week intervals. Others believe only in feeding during the period of active growth, from about May through November at six week intervals. Some who use this last method supplement it with feedings of 2—10—10 every four to six weeks during the period of dormancy. Regardless of the method used each is happy with the results obtained. And who said camellias were hard to grow?

While camellias may be easy to grow it cannot be disputed that they are sometimes unhappy with their local conditions. One of the foremost hobbyists in southern California planted a row of camellias along his western fence. At first they appeared happy with the morning sun and the afternoon shade. But in time they began to decline. Inspection of the ground revealed that the fruit trees of a neighbor that were a good fifteen feet away had invaded the camellia bed seeking their moisture and their food. Camellias will grow and thrive in the ground but they will not successfully combat invasive roots. Proof of their ability to grow and thrive in the ground under the filtered shade of overhanging trees may readily be found at Descanso Gardens or Huntington Gardens. As earlier noted, camellias must have good drainage. They will not tolerate wet feet. Certain areas of San Diego City and County have an underlying hard pan that prevents adequate drainage. Yet many lovely camellias are grown in these areas through the use of raised beds. Enclosing walls are built up about three feet and then are filled with good camellia soil mix. The only camellias that will seek to put their roots more than twelve to eighteen inches in the ground are seedlings whose tap root was not pinched off when the plant was quite young. None of the camellias bought from reputable nurseries should have tap roots. In fact, most of these plants are rooted cuttings which do not produce a tap root.

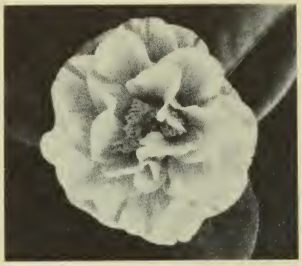
There are certain camellias that cannot be induced to be happy with a particular location. In my location near the coast I have tried to grow Pink Perfection, a real oldie but yet a beautiful small shell pink formal double. I had grown one of these on the outskirts of Washington, D.C. Some-

times a late hard freeze accompanied by stiff northwest winds would rob me of the uppermost blooms but the lower and more protected branches were reward enough. So I tried it here. I tried it in partial shade and in full sun—I tried everything until I finally pulled it up and put it in the garbage. Then after joining the San Diego Camellia Society, I learned that this camellia requires a certain amount of cold weather which we don't have. Around Ramona they may be found growing in full sun and yielding a profusion of bloom, even on frosty mornings. I have seen one of these plants growing near Ramona in rather deep shade and it was the saddest looking specimen that can be imagined. It obviously wasn't getting the required sun and so what has been said about filtered shade is not universally the truth but only a majority truth. I'm trying it—so far without disaster. On the other hand, there are camellias that will thrive in our coastal climates and not do well in our inland climates. Usually your nurseryman can give you some guidance in this area.

Some of our gardens do not provide the filtered shade required by most of the *japonicas*. Many camellia hobbyists who have show place gardens have provided this shade through the use of lathe houses and some through the use of saran cloth. Others have utilized those areas in the yard and around the house that allows for the morning sun but provides shade from the hot afternoon sun. Most of the *sasanquas* will take full sun and have been utilized with great effect in the more sunny areas.

Currently the colors in camellias range from whites which shade into the pinks which, in turn, shade into the reds, even the deep reds. But the hybridizers are busy. In time we will have the blues and the yellows. The Australians and New Zealanders have an anemone form camellia whose outer petals are a yellowish white but the petaloids are a butter yellow. Recent attempts by a southern California camellia hobbyist at grafting scions of this plant were not successful but it won't be long before we have this and many other camellias that are yellow, blue and purple.

The camellia is one of the most pest free plants that adorn our gardens. Little bothers it to any degree. Most hobbyists still follow a regular spray program as a precautionary measure using isotox, diazinon or malathion. If you are seeking prize blooms rather than just garden color, such a spray program is recommended. On the other hand, where garden color is all that is desired, spraying may rarely, or not at all, be required. □



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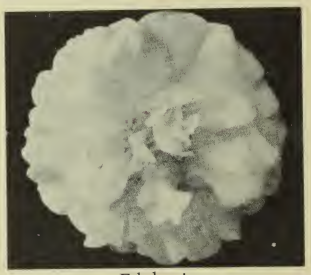

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Amateur Rose Breeding In San Diego

by RICHARD D. STREEPER

Illustrations by Marjorie Brooks

I WELL REMEMBER my first interest in growing roses from seed. I was in my last year in law school in Oregon. I had learned about all one could learn in the absence of any practical experience. I gathered several seed pods (hips) from the neighborhood and removed the seeds. In those days my hands were not as tough as they now are from years of weekend labor. The thing I most vividly recall from that experience was coating my fingers with the burrs from inside the hips. It was rather like a hound's first introduction to a porcupine. I carefully refrigerated the seeds, then set them out, and produced not a single seedling. Despite that introduction, an interest was kindled which prompts me to commend this hobby to all.

Plant breeding should be of particular interest to San Diegans because the climate here is perfectly suited for many types of breeding, including that of roses. This paper sets forth the methods which I employ and some of the factors which I think are important.

In the interest of conveying complete information, I should state that I live in the El Cajon valley. We have about thirty sub-freezing nights each winter. The coldest temperature each year is 27° with 23° being the coldest temperature I have recorded in eleven years. The first frost occurs about December 15th and the last frost about March 15th. The first peak of bloom comes about mid-April. I believe that this constitutes ideal climate for breeding.

Much has been written about the difficulty in breeding roses and the statistical odds against producing a good rose. I have read that the odds are one in one-hundred thousand for the production of a commercially acceptable rose. However, I do not believe that any individual can adequately evaluate more than 10,000 seedlings per year. Most amateurs could raise 1,000 seedlings per year with careful planning and this should produce one or two very fine and commercially acceptable roses in a lifetime. The breeding methods which I employ are very simple and consistently produce a multitude of healthy seedlings with little effort.

For those not familiar with rose breeding, let me say that all new types of roses are produced by hybridization, that is, by the cross-pollinization of plants. Identical copies of a plant may be produced by asexual reproduction, that is, from grafting or growth from cuttings. The seed from all modern roses will produce offspring quite different from either parent.

From a chronological point of view, the first step in a hybridization program is the selection of parents. From the point of view of development of skills by the hybridizer, this is usually the last to be developed. Parent selection is both an art and a science. A thorough background in genetics is of little value if the hybridizer can not recognize a good rose or over-estimates the value of a mediocre rose. A lack of scientific knowledge can lead to an undue amount of wasted time and effort.

There are a few rules in breeding which I think an inexperienced amateur might safely follow. First, try to isolate traits and rate every rose on the basis of each trait. Take, for example, the matter of flower color. Note the color of the bud, the color of the finished bloom, the color of the petal base and that of the inside and outside of the petals, the clarity of color and the hue. From a more subjective point of view, is the color distinctive, does it have a pleasing fade quality, does it intensify in sunlight or in shade, does it improve in the summer or the fall?

Flower color is only one small area of awareness required of the breeder. The longer one works with roses, the more one sees in the plants. Things such as flower form, blooming habit, plant size and

shape, foliage and thorns and disease resistance are also essential. The rose hybridizier should try to rate each rose in as many of these elements as possible. In all but an unusual breeding program, plant vigor and floriferousness should be primary requirements in the selection of parents. If one parent has a weakness, try to offset that weakness in the other parent.

It is best to have something specific in mind with each plant cross. If the object is a dark red garden rose producing fragrant hybrid-tea blooms of exhibition quality, select parents which have these qualities in themselves, or in their background. If one parent has a weakness in a trait, offset that through the other parent by strength in that trait. It is also best to have some conception as to why the offspring should be better or more distinctive than the parents.

The time of breeding is of considerable importance. I have had little success in setting seeds from crosses made out of doors in April (at the first bloom when average humidity is high). Seed set in May and June (dry months) is very good. Over fifty per cent of the seeds set in these months will germinate. It is easy enough to set seeds from crosses made in July through October although a small percentage of these seeds will germinate.

I make my crosses by preparing the seed and pollen parents at the same time. By May of each year I have some general idea of the plants I want to involve in the year's breeding program. I do not store pollen because of the added effort required. Thus, if a cross is to be made, both parents must have flowers at the same stage at the same time. I have one rose bed devoted to plants to be used as seed parents. If there are flowers in a stage for breeding and the planned pollen parent has no flowers ready for service, I look about the garden for other suitable pollen parents. However, last minute selection of parents should be made with care. Most success comes from carefully planned selection of parents.

I remove all petals from both the seed and pollen parents. This is done in every case when the bloom is open at a perfect exhibition stage. All pistils are removed from the flower designated to be the seed parent. The stigma is removed from the flower designated to be the pollen parent. About two days later, the pollen should be free and clearly visible if the flower is agitated. The stigma should be slightly sticky. From the time of preparation onward, I like to cover the hips with glassine envelopes. I use two by three inch envelopes (the type used by stamp collectors) torn in half. These may be held in place by twistems. They are good for holding the pollen in place on the male plant and they protect the female flower from chance pollination. When making the cross, I remove the male flower from the bush and use the stamens as a paint brush to brush pollen into the stigma of the female hip. When the pollinization is completed, I recover the female hip, using the glassine cap from the male hip which often has pollen attached, and tap the cap a time or two to aid pollen distribution over the stigma. An appropriate tag is then attached to the hip indicating parentage.

Harvesting of the seeds is done in November. To the extent possible, all of the seeds of common parents are harvested in a batch. As seeds are separated from the hip they are dropped into a bucket of water. The floating seeds and debris may be skimmed off and discarded. The seeds whch settle in the water should be immediately planted. I believe that the germination rate and speed of germination is greatly improved if the seeds are not permitted to dry out after harvesting. I plant the seed at the rate of one dozen to a four inch plastic pot. The planting medium is sterile spagnum and sand in equal parts. At this stage plastic pots are good because they help to retain moisture and reduce the need for care. After planting, the pots are placed in a cool damp spot out of doors. You might expect germination in six to eight weeks. Little germination takes place after twelve weeks and in the effort to conserve space and effort, I generally discard pots without germination after four months. In a typical case, four to eight seed-

lings will emerge at about the same time in the pot. When the seedlings are about one inch tall, I place the pot over a fine screen and wash the soil out of the pot. It is not possible to prick out the seedlings without damage or death. By this method, all of the roots will be preserved and the plant will not be checked in repotting. I transfer each seedling into a four inch clay pot. I believe this is the optimum container for seedlings to the time of first bloom. The first bloom usually comes six to eight weeks after germination.

I find the cross-pollinization process to be slow and time consuming. I can make about six crosses in half an hour in a summer evening. The seed harvesting, planting and labeling can be done at the rate of about two hundred viable seeds per man hour. I grow between 500 and 2,000 seedlings per year using an eight foot by twenty foot greenhouse to speed growth of the seedlings. Things are much less complicated if seedlings without promise are immediately discarded. Plants with promise should be moved from the four inch pots and forced into growth, although in this process, it should be recognized that flowers will not be at their best if the plants are pushed too hard.

The things I look for in the first bloom are novelty of color, plant vigor and bloom shape. Unless I am breeding for a clear pink, or the parents have good pink potential, a pink seedling is discarded. Petal base color is helpful in evaluation at this point. The base of a pink rose should be pink or white and not yellow. Five petaled roses, and those with a great number of petals, in nearly every case are discarded. Cupped shaped blooms are discarded.

What are the odds of success? To answer this, one has to define success. If success means producing an award winning commercially profitable rose, the chances are slight. If success means the creation

of a rose equal to the best roses of thirty years ago, the chances are very good. Much depends upon the type of breeding program undertaken. I have crossed Carrousel with Moulin Rouge and have produced a very high percentage of interesting and attractive dark red seedlings. The probability of producing a really distinctive rose from this cross is slight. I have crossed Lavender Pinocchio with Madame Chiang Kai-shek with virtually no satisfactory seedlings but, I believe this is the type of cross which has one chance in a thousand of producing a highly distinctive and valuable rose.

I have been successful because I enjoy the "doing". Producing roses which are beautiful in my eye is significantly more enjoyable than growing beautiful roses which have been developed by others. □

Roses for Balboa Park

by JEAN KENNEALLY

FROM ITS INCEPTION in 1927, the San Diego Rose Society has had as one of its prime objectives the establishment of a rose garden in Balboa Park. The late Forrest Hieatt, who organized the society, was instrumental in getting the first rose planting in the park for the 1915 Exposition. This was in a relatively small area just north of the present Bowling Green. People who remember the plot say it was very lovely—like coming on a jewel box in the woods, mainly because it was completely surrounded by trees. Many of these trees were eucalyptus, and not too compatible with roses. As years went on and city maintenance funds declined in the depression, this garden was very neglected. Most of the plants reverted to their Ragged Robin understock. When I frist saw it in the 1930's, practically all of the surviving plants were Ragged Robin.

In 1930 Walter Merrill designed a very elaborate rose garden which incorporated other ornamentals. This would have been placed in the area along Sixth Avenue. Quoting from his prospectus, "The rose beds, 168 in number, are designed to carry 24-36 bushes each of 384 varieties." His presentation ends: "The principal thought in the whole plan has been to give the garden architectural beauty for the pleasure of the casual visitor and at the same time to afford the student of horticulture or the home-owner planning his own garden the opportunity to compare different varieties as they mature." Everyone agreed this was a desirable and laudable undertaking, but available funds were diverted to other projects.

A new rose garden was established at the time of the 1935 Exposition. This was located behind the Organ Pavilion in an area that is now a parking lot. Almost all the roses in this planting were "San Diego" roses, the original "San Diego" which Forrest Hieatt hybridized and propagated for the Exposition. It was a nice apricot-yellow bloom with tinges of red in the outer petals. Unfortunately the plant was not too vigorous, and few if any now exist.

In the 1940's Milton Sessions with former park director Allen Perry, drew plans for another magnificent rose garden. This, like Walter Merrill's plan, was to have been located on the Sixth Avenue side of the park. It featured walled beds, a central pool, surrounding pergolas and was a truly beautiful concept. At the time it could have been completed for less than $100,000. It was hoped that when the Navy relinquished the park after the war that this might become a reality, but again the influx of population after the war with resulting urgent needs for expanded city services pushed it back on the shelf.

A subsequent rose introduction now bears the name "San Diego". This rose was introduced by Armstrong Nursery to celebrate San Diego's 200th birthday anniversary. Mrs. William Betts who was Floral Chairman for the 200th Committee invited me to help her select this flower as the official rose of the celebration. Armstrong's had only two available unnamed roses from which to choose—the rose now known as Marie Antoinette and the yellow one which the committee chose as the new San Diego. A rose bed of this rose bordered El Prado from the Fine Arts Gallery to the Natural History Museum during the 200th Birthday Celebration. The plants were later moved to the formal garden behind the Natural History Museum. This garden is the longest existing rose planting in the park. It has a very good central location and good sunny exposure, but the entire formal bed planting is depleted and drained by the beautiful but voracious ficus in the middle of the area. It is almost impossible to keep the roses adequately watered and only the hardiest survive. Perhaps these survivors will be moved to the new garden and take a new lease on life.

Over the years many persons have kept the idea of a rose garden alive: Forrest Hieatt, Ed Adams, Donald Forbes and many others. Currently the person deserving the most credit for constantly keeping the project before the city is Richard Streeper. He deserves our gratitude.

And now, after all these compromises and disappointments, we are really to have a lovely garden. It's a dream come true! □

The Star Pine

by EDWIN D. WOODHOUSE

THE STAR PINE, Norfolk Island Pine, or Monkey Puzzle—by any other name, this distinctive evergreen tree, *Araucaria excelsa*, would be just as attractive. The regularly spaced whorls of branches on the main trunk are unique. As a potted plant in the house or patio, it has a candelabra-like appearance. As a mature tree, it is outstanding.

Araucaria excelsa was discovered by Captain Cook on his South Sea voyages, along with *Araucaria columnaris* or Cook's Pine. *A. excelsa* is cone-shaped in outline while *A. columnaris* is less spreading and more columnar in outline. Both species were names by Robert Brown and are sometimes confused with one another. The genus name is derived from "Arauco", a province in Southern Chile. *A. excelsa* does, indeed, excel over many other trees and can be distinguished from a distance.

When it comes to common names, "star" describes the appearance of the topmost whorl of branches, while "Norfolk Island" gives the place of nativity. "Pine" is a misnomer, as elucidated below. "Monkey Puzzle" is loosely applied to the *Araucaria* family, but should preferably be reserved for *A. imbrecata*, with its stiff, sharply tipped leaves overlaid like shingles along the branches. It is a tree that would indeed be impossible for a monkey to climb, as demonstrated by their use on the monkey island at the Fleishaker Zoo in San Francisco.

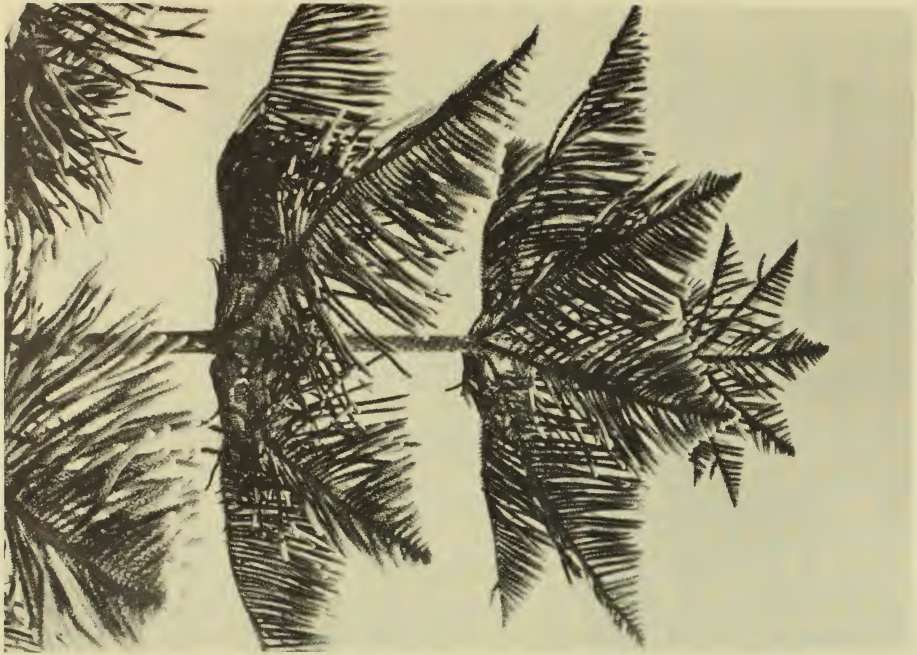
Although *Araucarias* and Pines are both conifers, there are so many differences between them that most botanists give the former the rank of a separate order, not just a separate family. The most obvious difference is that *Araucaria* and its relative *Agathis*, have broad leaves instead of narrow or needle leaves. The former is considered to be a more primitive form. Another gross difference is that the *Araucarias* are the only conifers that have but a single seed on each cone scale, while the Pines have two and the Cypresses and Redwoods have several seeds on each cone scale. Thirdly, the Pines are northern hemisphere while *Araucarias* are southern hemisphere.

All of these Conifers are classified as Gymnosperms or Naked-seed plants. (When exercising in a gymnasium, one may be slightly naked.) In the structure of the cone, there is a bract beneath each seed-bearing scale. In the case of *Araucaria*, as the cone matures, the edges of the scale grow fast to the edges of the bract of the next scale above, so that at maturity the seed is actually completely covered by these two structures—it is no longer naked. Conversely the seed-pods of many flowering plants break open so that the seeds become naked at maturity. Of the several species, *A. bidwillei*, the Bunya-bunya Tree, has the largest seeds, being about the size of a Brazilnut seed. If fertile and mature, they are good eating. The cone that bears them in the tip-top of the tree is green in color and about the size of a pineapple.

There are also microscopic differences that set the *Araucarias* apart as more primitive on the evolutionary scale than the rest of the conifers. In this day and age, chromosomes are part of the common knowledge, together with the fact that animal body-cells have a diploid or double set of chromosomes in the nucleus while eggs and sperms have a haploid or simple set. Many persons are still not aware of the fact that pollen grains develop into a multinucleate or multicellular haploid structure and likewise that such a haploid structure develops within the ovule or immature seed. In the case of the *Araucarias*, the haploid structure derived from the pollen grain is larger and contains many more cells than in the case of the Pines, indicating that they are less removed from their fern antecedents. Again, the two sperm cells produced in this haploid structure, although without cilia and requiring a pollen-tube to conduct them to the egg, are spiral in shape, reminiscent of the sperm cells of a Fern.

Thus, *Araucaria columnaris* is not only a distinctive tree, but along with the other *Araucarias* occupies a unique position in the evolution of the "Plant Kingdom". □

RIGHT: Pictured is the top portion of a Star Pine. *Photo by Betty Mackintosh.*



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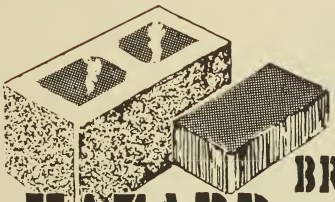
BLOC  BRIC
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Horticultural Palindrome

Kansas City University professor of horticulture **R.W. Funsch** adds a horticultural twist to what may be the longest single word palindrome in the English language. A palindrome is a word or phrase that reads the same backwards and forwards.

The word is Kinnikinnik, an Indian word for the mixture of dried leaves and bark that was smoked (with or without tobacco) by the Indians and pioneers in the Ohio Valley and the Great Lakes Region. The mixture included: *Arctostaphylos uva-ursi* (red bearberry); *Cornus amomum* (silky cornel); *Cornus stolonifera* (red osier); *Rhus virens* (sumac) or a related shrub *R. microphylla.*

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Bicentennial Garden

by BARBARA JONES

WITHIN THE Independence National Historical Park in Philadelphia, Pennsylvania is a delightful 18th Century garden. The garden embodies much of the horticultural spirit of Colonial America and is in the location of a garden maintained by a gentleman named William Hamilton. The buildings on each side were built in the early 19th Century but the buildings next to them were built over 200 years ago, one belonging to John Todd, the first husband of Dolley Madison, and the other belonging to Bishop White. The area was prosperous and fashionable but on the outskirts of town.

Students of garden design may be confused by the date and design. The style is unmistakably English with grass and flowers combined in formal geometrical patterns. By the 1700's the English were abandoning this style for informal landscaped gardens, but in the Americas, the colonists copied gardens that they or their forbears had left a generation or more before. So in the 1850's gardens, a style that had been popular in England over 50 to 100 years earlier was still being used.

This historical garden reproduction is divided into three sections: a small formal garden with gravel walks and parterres (ornamental beds) filled with colorful flowers, a small orchard, and an area reserved for vegetables and herbs. The formal garden reflects the wealth and urbanity of this prosperous city. The growing of fruits like apples and pears was a popular hobby of the well-to-do, and if space was not available for an orchard, the fruit trees were espaliered on a courtyard wall. In the 1750's, many Philadelphians, including William Penn and Benjamin Franklin, were active in collecting and growing plants for food and ornamentation. Therefore, the city garden of that era combined careful design, refined taste, and choice plants.

Plants in an 18th Century garden were a mixture of native species and those imported by the colonists. In Philadelphia, native American plants used were rhodendron, clethra, bayberry, leucothoe, trumpet vine, winterberry and holly. Imported exotics were ginko, chrysanthemums and roses from China; apples, pears, grapes and blue grass from Europe; geraniums from South Africa; ageratum, zinnia, cosmos, lantana, and salvia from Central America via Portugal.

Herbs which were commonly grown in the Colonial Garden were:

Artemisia pontica (Roman Wormwood), for reducing fevers.

Asperula odorata (Sweet Woodruff or Waldmeister), for smelling salts and headaches.

Melissa officianalis (Lemon Balm or Sweet Balm), a tea for everything.

Mentha, for tea.

Monarda didyma (Bergomat or Bee Balm).

Morrubium vulgare (Horehound), a cough medicine.

Ruta graveolens (Rue or Herb O'Grace), for a disinfectant.

Stacys lanata (Wooly Lamb's Ears), for healing open wounds.

Tanacetum vulgare (Tansy), a tea to avert colds and reduce fever.

Teucrium chamaedrys (Wall Germander), for gout.

The following culinary herbs were also grown:

Allium tuberosam—daffodil garlic.

Allium schoenoprasum—chives.

Artemisia dracunculus—French Tarragon.

Satureja montana—Winter Savory.

Artemisia ludoviciana—Silver King.

Lavandula vera (Lavender), was used to scent freshly washed clothes.

This historical garden is beside the buildings occupied jointly by the Pennsylvania Horticultural Society and the Philadelphia Society for Promoting Agriculture. The gardens are maintained by the Historical Society. Inside the buildings are many exhibits of gardening tools, plants, seeds, and small dioramas of typical gardens and heated garden houses of the 18th Century. If you get to Philadelphia, do take time to see these gardens and displays. It will give you a special glimpse into life in colonial America, and will certainly bring more meaning to our country's Bicentennial Year celebration. □

Two Plant Communities

by TIMOTHY McDONNELL

THE CHAPARRAL PLANT COMMUNITY

The chaparral is characterized by a broad-leaved sclerophyll type of vegetation, three to six to ten feet high and dense, often nearly impenetrable. Its growing season ranges from eight to twelve months. Best suited for a climate with an average rainfall from 14 to 25 inches annually, the chaparral plant community prefers hot, dry summers and cool but not cold winters. Chaparral is found on dry slopes and ridges in coastal mountain ranges from Shasta County south, and below the Yellow Pine Forest plant community on the western side of the Sierra Nevadas and more southern mountains. The soils of the chaparral range from rocky, gravelly, to fairly heavy.

Another feature of the chaparral is that it is extremely susceptable to fire. The plants of this community have made some amazing adaptations to this potentially destructive element. Plants such as manzanita and chamise are capable of stump-sprouting only a few months after they have been burned completely to the ground. Some plants such as *Oenothera leptocarpa*, even seem dependent on fires for seed germination.

THE CREOSOTE BUSH SCRUB COMMUNITY

The creosote bush scrub plant community is characterized by shrubs of two to ten feet tall which are widely spaced and largely dormant between rainy periods. Creosote bush scrub occurs in the well-drained soil of slopes, fans, and valleys usually below 3,500 feet elevation in deserts from the southern end of Owens Valley to Mexico. The average rainfall there is from two to eight inches annually, some occuring in summer showers.

COMMENTS ON USES OF THESE PLANTS

Cattail (*Typha*)—The Greek, Dioscorides, recognized the ability of the catkins when mixed with hog grease would heal burnings, and also stop bleeding, and moderately cleansed wounds. Indians used the leaves for chairs and mats. The starchy rootstocks may be eaten raw, cooked as a vegetable and dried and ground into meal. The people of India harvest the pollen and make bread from it.

Wild Cucumber (*Marah*)—When the pods are ripe they pop open and scatter large brown seeds that are covered with a soapy film. The Indians roasted the seeds and ate them for kidney trouble. Oil extracted from the seeds was used for falling hair. Crushed pieces of the green roots were put in streams to stupify fish. Mexicans used the juice of the roots for tanning purposes.

California Fan Palm (*Washingtonia*)—Indians would roast and eat the berries or ground them into flour for cakes. Strings from the leaves were used for weaving baskets, and the leaves themselves were used to thatch their houses.

Scrub Oak (*Quercus*)—The acorns were soaked overnight by the Indians to make it easier to get the kernels from the shells, which were then dried and ground into flour or meal. The meals were then leached for about a week to remove the bitter taste, afterwhich it could be used in soup, bread, and pudding.

Yucca (*Yucca*)—Indians would eat the flowers and fruits raw, or roast and dry the fruits for future use. The fibrous leaves were used in making baskets and mats. The roots were used as a substitute for soap.

Buckwheat (*Eriogonum*)—The leaves were used by Indians in a decoction for headache and stomach pains, the stems and flowers were used to make

tea for high blood pressure, bronchial ailments, and bladder trouble.

Chamise (*Adenostoma*)—Indians used an infusion of bark and leaves as a cure for syphilis. Also, an oil yielded by the plant was used for skin infections.

Toyon (*Heteromeles*)—Fishermen in the Channel Islands used the bark to tan their fish nets. Indians boiled the berries and baked them in ground ovens for two or three days. The berries were also dried and made into meal.

Creosote Bush (*Larrea*)—Yields a gum that Indians used to attach arrow tips to the shafts of fire-hardened wood. A decoction of the leaves was used for stomach disorders, chicken pox, kidney trouble, colds, snake bites, rheumatism, venereal disease, and tetanus.

Lemonadeberry (*Rhus*)—Has red berries used in making a drink that tastes like lemonade.

Lilac (*Ceanothus*)—The Indians used the seeds as food, the flowers for soap, the leaves for tobacco, and the bark and roots as an astringent. One variety of *Ceanothus* is beneficial as a blood coagulent and also for coughing and tonsilitis.

Manzanita (*Arctostaphylos*)—Indians ate the berries raw, cooked or ground into meal. A cider and jelly can also be made from the berries. The leaves were mixed with tobacco and smoked.

Monkey Flower (*Mimulus*)—The young stems and leaves were used by the Indians for salad greens. The roots were used as an astringent, and the leaves were crushed and used as a poultice for burns.

Beard Tongue (*Penstomen*)—Mexicans boiled the flowers and drank the liquid for kidney trouble. Indians made poultices for burns from the flowers.

Jimson Weed (*Datura*)—The dried leaves were smoked and said to be beneficial for asthma. It was used by priests of Apollo at Delphi to produce ravings and prophecies and by Mexicans and Indians to induce a hypnotic state and deep concentration.

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–A Cultural Calendar of Care from our Affiliates–

BEGONIAS

MARGARET LEE

- ✓ to keep plants clean of old foliage and dead leaves.
- ✓ to watch the water program; do not allow to become too dry; they need less water at this time due to slower growth.
- ✓ to protect those plants exposed to any heavy rains—especially the rhizomatous and semi-tuber types growing in containers.
- ✓ to add more potting mix to keep roots covered where soil may be washed out of pots.
- ✓ to spray for mildew, to control slugs, snails and mealybugs, and for loopers.
- ✓ to start tubers for bloom later in the year (February).
- ✓ to start cutting back, lightly on the cane variety and shrub types (toward the end of this period .)

BONSAI

HERBERT MARKOWITZ

- ✓ to use a dormant spray such as copper, oil or lime/sulphur mixtures—particularly on maples, quince, and other deciduous trees after they have been pruned.
- ✓ to watch for aphids and other sucking insects and spray accordingly.
- ✓ to graft conifers during January, and deciduous trees in February.
- ✓ to carefully observe deciduous trees if there is warm weather in the latter part of February. If your trees are NOT kept in the shade, they will start blossoming and sprouting.
- ✓ not to fertilize your trees; REMEMBER—do not overwater.

CACTUS & SUCCULENT

NIBBY KLINEFELTER

- ✓ to provide a cosy corner for succulents.
- ✓ to move the mimicry plants of the *Mesembryanthemum* family who cannot tolerate cold wet conditions to a warm dry spot. Perhaps they would like a dry sunny windowsill.

CAMELLIAS

- ✓ to remove poor and old blossoms to prevent any fungus build-up.
- ✓ to use a fungicide if needed.
- ✓ to plant or transplant while in bud or bloom before new growth starts.
- ✓ to visit nurseries to select new plants while in bloom—select new colors and varieties.
- ✓ to feed 0—10—10.
- ✓ to check soil mulch, and add damp peat moss or leaf mold at base of established plants.
- ✓ to be sure NOT to plant new ones too deeply—plant should be about 2" above soil level; firm in soil so they will not settle; mulch at baseline.

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DAHLIAS

✓ to dig those tubers (early January) left in the ground as the tops should be completely withered. Cut tops just above the ground.
✓ to store tubers without dividing them; leave soil on that clings to roots.
✓ to inspect those tubers that have been stored for any signs of rot or shriveling. Cut away any rot. If too dry—add a little moisture.
✓ to start out in February, some selected roots to send out sprouts which will make cuttings. This is an economical way of getting a number of plants from expensive varieties. You may apply bottom heat to encourage sprouting.
✓ to start in February to prepare your garden spot for dahlia planting. Turn soil, add humus, fumigate; add humus, equal of superphosphate and sulphate of potash. Add fertilizer two or three weeks before planting.

EPIPHYLLUMS

GEORGE FRENCH

✓ to protect against too much water, particularly if a rainy season. Be sure they do not dry out; this is very important.
✓ to feed in late January or early February with a low nitrogen fertilizer; use a teaspoon to a quart of water when they start budding.
✓ to watch for snails and slugs.
✓ to tie stems that have produced long growth; protect from breakage.

FUCHSIAS

WILLIAM SELBY

✓ to start some pruning in frost free areas. Remove all weak, thin branches. Cut all good healthy growth back at least one-third or leave two or three eyes (nodes). Cut baskets back to edge of basket and trim to within four inches of soil on top.
✓ to shape plants according to variety.
✓ to give a good 10—5—5 fish type fertilizer after pruning.
✓ to take cuttings from those good end clippings. In cool weather, it will take a little longer to root.
✓ to pinch those plants that were pruned in the fall.
✓ to do a thorough clean-up of ground and baskets; give a good clean-up spray—not only on the basket but also on the ground.

GERANIUMS

GLORIA CAVANAUGH

✓ to still prune and shape your plants; take cuttings from them and start for new plants.
✓ to clean-up the debris and old leaves from around the plants.
✓ to feed lightly with high nitrogen fertilizer.
✓ to protect plants from too much water.

IRIS

ART DAY

✓ to start a regular spray program with copper oil spray to help control rust.
✓ to continue watering your bearded iris if rains are light.
✓ to start in February to feed all iris with a liquid 0—10—10 fertilizer. Follow directions carefully—do not over-fertilizer.
✓ to plant dutch iris for spring bloom.

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ORCHIDS

LOIS DONAHUE

- ✓ to stake the flower spikes of cymbidiums and put the light flowered ones in shade to protect color.
- ✓ to continue high-phosphorous feedings for cymbidiums in bloom.
- ✓ to check and protect against snails and slugs.
- ✓ to do the last repotting of crowded phalanopsis—use a high-nitrogen fertilizer for phals in firbark.
- ✓ to check moisture in outdoor plants; gray days may fool one and plants might quickly dry out.

ORGANIC GARDENING

JOHN MILLER

- ✓ to chop up and put in compost for plantings.
- ✓ to plant herbs; start rooting penny royal, mint, and tansy.
- ✓ to plant members of the cabbage family—chard, kale, peas, turnips, radishes, parsley, and lettuce.
- ✓ to plant marigolds, both french and regular, to help control white flies and nematodes.
- ✓ to plant chrysanthemums in containers to be placed in the garden.
- ✓ to plant comfry in containers with lamb's quarter.
- ✓ to use 100% organic fish emulsion now on the market. Use alone, or half and half with seaweed liquid.

ROSES

DEE THORSON

- ✓ to prune established plants.
- ✓ to plant bare-root roses; mounding each bush with damp earth to prevent drying out. Keep mounded until new growth starts.
- ✓ to do clean-up jobs and dormant spraying after pruning.
- ✓ to cultivate the established rose bed. Feed bushes as growth starts—one cupful per bush.
- ✓ to give liquid feeding to new bushes about six weeks after planting.
- ✓ to establish a watering and spraying schedule.

GREEN THUMB ITEMS

- ✓ take marguerite cuttings from new tips. Remove lower leaves and insert half the cutting in rooting medium. Keep in a shaded place until rooted.
- ✓ start to plant gladiolus bulbs, and make successive plantings at monthly intervals for flowers over a longer period of time.
- ✓ plant hybrid amaryllis bulbs out in a sunny or semi-shaded area with the tip of the nose just showing.
- ✓ to be drastic and cut chryanthemums back to the ground.
- ✓ to prune flowering trees and shrubs because you can shape them and use the flowers in arrangements.
- ✓ to plant bare-root stock of roses and trees(both fruit and shade). All newly planted trees and plants must be kept moist while they are making new roots and top growth.
- ✓ for spraying. Spray all deciduous trees and shrubs with a com bination insecticide and fungicide such as oil and lime sulphur or copperus. Follow directions as given. Continue to bait for slugs and snails.

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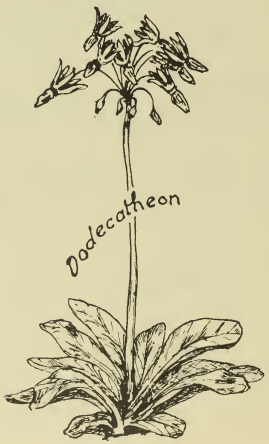

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Pres: Frank Bornemann—466-5525
4618 Edenvale Avenue., L.M. 92041

COUNTY CIVIC GARDEN CLUB
Every Tues., 12-1:00 p.m., Garden House, Grape and 101 Civic Center
Director: James Saracino—239-9511
1600 Pacific Highway, S.D. 92101

IKEBANA INTERNATIONAL CHAPTER NUMBER 119, Fourth Wed., Casa del Prado
10:00 a.m.
Pres: Mrs. B. Donald Gaw—485-0116
13818 Tam O'Shanter Ct. Poway 92064

FLEUR DE LEAGUE
Second Mon., Homes of members, 10:30 a.m.
Pres: Mrs. Stephen Kew—223-6875
3714 Dudley Street, S.D. 92106

LA JOLLA GARDEN CLUB
First Tues., 1:00 p.m., St. James Hall, 7776 Eads Avenue., La Jolla
Pres: Mrs. Joseph Aron—459-1516
7750 Sierra Mar Drive, L.J. 92037

LAS JARDINERAS
Third Mon., 10:00 a.m., Homes of members
Pres: Mrs. Edwin Balmer—454-5851
7720 Sierra Mar Dr., L.J. 92037

MEN'S GARDEN CLUB OF S.D. CO.
Fourth Thurs., Casa del Prado, 7:30 p.m.. Pres Mr. M.L. Barksdale—222-2884
3756 Milan Street, S.D. 92107

ORGAINC GARDEN CLUB
Third Fri., Casa del Prado, 7:30p.m.
Pres: Fred Nimtz—479-7585
3815 Valley Vista Road, Bonita 92002

PALOMAR DISTRICT, CALIFORNIA GARDEN CLUBS, INC.
Director: Mrs. Roy K. Jones II—222-9737
3971 Del Mar Ave., S.D. 92107

POINT LOMA GARDEN CLUB
Second Wed., S.D. Federal, Rosecrans and Canon, 10:00 a.m.
Mrs. L. L. Cottingham—222-4616
735 Cordova Street., S.D. 92107

SAN CARLOS GARDEN CLUB
Fourth Tues., San Carlos Club, 6955 Golfcrest Drive
Pres: Mrs. R. Matthews—286-0753
8095 El Extenso Ct., S.D. 92119

SAN DIEGO BONSAI SOCIETY, INC.
Second Sun., Casa del Prado, 1-5:00 p.m.
Pres: Dr. Herbert Markowitz—224-8552
876 Armada Terrace, S.D. 92106

SAN DIEGO BOTANICAL GARDEN FOUNDATION, INC.
Second Thurs., Casa del Prado
Pres: Mrs. Joseph Kenneally—223-6183
2260 Catalina Blvd., S.D. 92107

SAN DIEGO CACTUS & SUCCULENT SOCIETY, 2nd Sat., Casa del Prado, 1:30 p.m.
Pres: Joseph Bibbey—423-5133
490 Citrus Ave., Imperial Beach 92032

SAN DIEGO CAMELLIA SOCIETY
Third Wed., Casa del Prado, 7:30 p.m.
Pres: Capt. Ben H. Berry—435-2562
471 Country Club Lane, Coronado 92118

SAN DIEGO CHAPTER, CALIFORNIA NATIVE PLANT SOCIETY, Fourth Wed., Casa del Prado, 7:30 p.m.
Pres: Earl Galloway—282-0388
4365 Alder Dr., S.D. 92116

SAN DIEGO COUNTY DAHLIA SOCIETY
Fourth Tues., Casa del Prado, 7:30 p.m.
Pres: Abe Janzen—277-4473
3521 Belford Street, S.D. 92111

SAN DIEGO COUNTY ORCHID SOCIETY
First Tues., Casa del Prado, 7:30 p.m.
Pres: Mr. Rex Foster—466-0605
2645 Massachusetts Ave., Lemon Grove 92045

SAN DIEGO EPIPHYLLUM SOCIETY
Second Wed., Casa del Prado, 7:30 p.m.
Pres: Mr. Donald Irwin—469-2469
4124 N. Rogers Road, Spring Valley 92077

SAN DIEGO FUCHSIA SOCIETY
Sec. Mon., Casa del Prado, 8:00 p.m.
Pres: Mrs. Frank Calamari—232-8232
2867 "G" Street, S.D. 92102

SAN DIEGO GERANIUM SOCIETY
Sec. Tues., Casa del Prado, 7:30 p.m.
Pres: Mrs. Wm. Cavanaugh—224-9208
4377 Loma Riviera Ct., S.D. 92110

SAN DIEGO/IMPERIAL COUNTIES IRIS SOCIETY, Third Sun., Casa del Prado, 1:30 p.m.
Pres: Mrs. Eugene Cooper—295-7938
4444 Arista Drive, S.D. 92103

SAN DIEGO ROSE SOCIETY
Third Mon., Casa del Prado, 8:00 p.m.
Pres: Mrs. Allen P. Sears—461-6408
1510 La Corta, Lemon Grove 92045

SAN DIEGO TROPICAL FISH SOCIETY
Sec. Sun., Casa del Prado, 7:30 p.m.
Pres: William McColl—271-0731
8613 Bennington St., S.D. 92117

SOUTHWESTERN GROUP, JUDGES' COUNCIL CALIFORNIA GARDEN CLUBS, INC.
First Wed., Casa del Prado, 10:30 a.m.
Pres: Mrs. Jose Garcia—264-4167
319 South 39th Street., S.D. 92113

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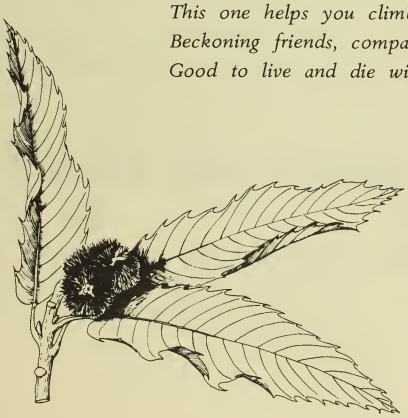
92045

Time is never wasted listening to the trees;
If to heaven so grandly we arose as these,
Holding toward each other half their kindly grace,
Haply we were worthier of our human place.

Bending down to meet you on the hillside path,
Birch and oak and maple each his welcome hath;
Each his own fine cadence, his familiar word,
By the ear accustomed, always plainly heard.

Every tree gives answer to some different mood,
This one helps you climbing; that for rest is good;
Beckoning friends, companions, sentinels they are;
Good to live and die with, good to greet afar.

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